

Asthma and Exercise for Children and Adults

Exercise is for EVERYONE.

Regular exercise is an important part of a healthy lifestyle. While exercise is good for you, exercise is also a common trigger of asthma. Some people have exercise-induced asthma (EIA). If your asthma is poorly controlled, you can also have more symptoms during exercise. When asthma is well controlled, you should not be limited in your activity levels. By working with your healthcare provider, you can make a plan that will help you to feel good and take part in normal activities and exercise.

What is exercise-induced asthma?

Exercise-induced asthma (EIA) is a form of asthma in which symptoms only occur with physical activity. Common symptoms of asthma that can occur with exercise are coughing, wheezing, shortness of breath, chest pain or tightness, tiredness, and difficulty keeping up with others.

Asthma symptoms can occur during vigorous activity, but usually start 5-10 minutes after stopping the activity. Sometimes symptoms can return hours later. How much trouble you have can depend on:

- The kind of activity
- How long or intense it is
- The environment you exercise in and air quality
- Your overall asthma control

With a good plan, you do not have to avoid intense sports or activities like swimming, long-distance running, or soccer.

Exercise and Asthma Control

If you have asthma that is not in good control, you may have symptoms with activity even if exercise is not always a trigger for you. If you can't do activities you want to do, think about your asthma control as well as triggers around you and what you can do to manage them. Talk to your healthcare provider about your asthma action plan.



How can I prevent asthma problems with exercise?

To stay active with asthma, or to become more active, these steps can help:

- Maintain good asthma control
- Identify your exercise-induced asthma triggers,
- Take your pre-treatment asthma medicine at least 15–30 min before exercising,
- Warm up before exercise, and
- End with a cool-down exercise.

What triggers might affect exercise-induced asthma?

If you are exercising outdoors you need to be aware of the air quality and any other triggers that might bother your airways.

- Air pollution is an irritant. Check for high ozone levels that can be a problem outdoors in summer months. You can get air quality information from the Environmental Protection Agency (EPA) AIRNow website (<http://www.airnow.gov>). Also check for local reports for your air quality.
- Other causes of air pollution include vehicle exhaust and fumes from factories.

- Some people can be bothered by cold air. You may want to exercise indoors or wear a covering over your mouth and nose.
- If you have allergies to any molds or pollens you could have problems. Ask your healthcare provider if you want to get allergy testing or help with allergies.

What are medicines used to treat exercise-induced asthma?

There are several kinds of medicine that can help you manage EIA and control your asthma.

The two main types are: bronchodilators and anti-inflammatory medicines.

Bronchodilators (medicines that open your airways by relaxing the muscles around your breathing tubes). There are short-acting and long-acting bronchodilators. Your healthcare provider will help you decide if a long-acting bronchodilator would be helpful for your asthma control and how its use might change your pre-treatment plan.

Short-acting beta-agonist bronchodilators include albuterol and levalbuterol. Ipratropium is a short-acting anti-cholinergic bronchodilator that is also used at times for exercise pre-treatment. You should take your short-acting bronchodilator 15–30 minutes before starting to exercise. It will not last longer than 4–6 hours. These are also used as “quick-relief” medicines for asthma symptoms.

Anti-inflammatory medicines (medicines used to prevent swelling in your breathing tubes). These medicines help control asthma and are usually taken every day (often called “controller” medicines). These include both corticosteroid (such as budesonide, ciclesonide, fluticasone, mometasone) and non-steroid medicines (such as montelukast and zifarlukast). There are also combination inhalers that have both an inhaled corticosteroid and a long-acting bronchodilator. You may not notice any immediate improvement when you use these medicines. They can take time to work.

If you have problems with asthma control and/or pre-treatment is not working for your EIA, you should talk to your healthcare provider about using a controller medicine.

Do warm-up and cool-down exercises help with EIA?

Spending 5 to 10 minutes warming-up before exercising can help to prevent asthma symptoms during exercise. During warm up exercise, begin walking slowly and slowly increase activity or speed over 3-5 minutes. Slowly cooling down for 5 to 10 minutes after exercising can help prevent asthma symptoms that might start after exercising. Your cool down activity can be walking or stretching.

What do I do if I have symptoms when I exercise?

Even if you use your short-acting bronchodilator medicine before exercise, asthma symptoms can occur during exercise. If they do occur, you should slow down your exercising. If symptoms continue to get worse, you may need to use your quick-relief medicine like albuterol. Even if you took this medicine before exercising, it is OK to take it again to relieve your symptoms.

Is my fitness level important?

If you are overweight or have not been getting regular exercise, you may be out of shape or in poor physical condition. Poor conditioning can make a person feel out of breath and be confused with asthma symptoms. Lack of physical fitness makes exercise seem harder and a person may feel out of breath sooner. It takes time and effort to build physical fitness and get in good shape. Make a plan to get in good condition gradually. ●

Reviewed/Updated February 2024 by Dr. Marianna Sockrider

Original Authors: Marianna Sockrider, MD, DrPH, Chris Garvey, FPN, MSN, MPA, Margie Haggerty APRN, AE-C

Action Steps

- If you feel your breathing is limiting your ability to exercise, tell your healthcare provider.
- Check the environment for asthma triggers before exercising.
- Make a plan to be active and exercise regularly.
- Do a gradual warm-up before exercise and a cool-down after exercising.
- Ask about the use of asthma medicines to help prevent breathing problems while exercising.

Additional Information

American Thoracic Society

<https://www.thoracic.org/patients>

- [How is Asthma Treated?](#)
- [Exercise and Lung Disease](#)
- [Using Your Metered Dose Inhaler](#)

American Academy of Pediatrics

- <https://www.healthychildren.org/English/health-issues/conditions/allergies-asthma/Pages/Exercise-and-Asthma.aspx>

Asthma UK

- <https://www.asthmaandlung.org.UK/conditions/asthma>